

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all previous versions and listings:

1. (Currently Amended) A method for loading database data into a target database, comprising the machine-implemented steps of:

analyzing metadata that describes one or more items, the data for which is in a source

database, wherein the one or more items include at least one of:

a view,

a sequence,

a dimension,

a cube,

an ETL mapping,

a queue,

an external table,

a stored procedure, [[and]] or

a database object, wherein the metadata for the database object is stored

outside of the source database and the target database;

wherein data for said one or more items resides in a data file associated with said

source database;

performing the following in a single atomic operation:

incorporating the data for said one or more items into the target database by

providing said target database access to an incorporated data file,

wherein said incorporated data file is said data file or a copy thereof;

and

incorporating the metadata for said one or more items into the target database.

~~accessing in the target database the data for said one or more items based on the
metadata that defines said one or more items.~~

2. (Original) The method of Claim 1, wherein said one or more items include one or more database views from the source database, and the step of analyzing metadata that describes one or more items, the data for which is in a source database comprises the step of analyzing metadata that describes said one or more database views.
3. (Original) The method of Claim 1, wherein said one or more items include one or more database sequences from the source database, and the step of analyzing metadata that describes one or more items, the data for which is in a source database comprises the step of analyzing metadata that describes said one or more database sequences.
4. (Original) The method of Claim 1, wherein said one or more items include one or more database dimensions from the source database, and the step of analyzing metadata that describes one or more items, the data for which is in a source database comprises the step of analyzing metadata that describes said one or more database dimensions.
5. (Original) The method of Claim 1, wherein said one or more items include one or more database cubes from the source database, and the step of analyzing metadata that describes one or more items, the data for which is in a source database comprises the step of analyzing metadata that describes said one or more database cubes.
6. (Original) The method of Claim 1, wherein said one or more items include one or more ETL mappings from the source database, and the step of analyzing metadata that describes one or more items, the data for which is in a source database comprises the step of analyzing metadata that describes said one or more ETL mappings.

7. (Original) The method of Claim 1, wherein said one or more items include one or more queues from the source database, and the step of analyzing metadata that describes one or more items, the data for which is in a source database comprises the step of analyzing metadata that describes said one or more queues.
8. (Original) The method of Claim 1, wherein said one or more items include one or more external tables from the source database, and the step of analyzing metadata that describes one or more items, the data for which is in a source database comprises the step of analyzing metadata that describes said one or more external tables.
9. (Original) The method of Claim 1, wherein said one or more items include one or more stored procedures from the source database, and the step of analyzing metadata that describes one or more items, the data for which is in a source database comprises the step of analyzing metadata that describes said one or more stored procedures.
10. (Original) The method of Claim 1, wherein said one or more items include one or more database objects from the source database, wherein the metadata for the one or more database objects is stored outside of the source database and the target database, and the step of analyzing metadata that describes one or more items, the data for which is in a source database comprises the step of analyzing metadata that describes said one or more database objects.
11. (Original) The method of Claim 1, wherein the target database stores data in a data files that have a first format, the incorporated data file is in a second format that is different from the first format, and wherein a database server that manages the target database accesses the one or more items from said incorporated data file.

12. (Original) The method of Claim 1, wherein a source database server manages data from said source database, a target database server manages data from said target database, and the step of analyzing metadata that describes one or more items, the data for which is in a source database is performed at least in part by a process that is separate from said source database server and said target database server.

13. (Original) The method of Claim 1, wherein at least a portion of said metadata is read from a source repository separate from said source database.

14. (Original) The method of Claim 13, wherein a source database server manages data from said source database, a target database server manages data from said target database, and said source repository is a repository associated with an application separate from both said source database server and said target database server.

15. (Original) The method of Claim 14, wherein said application is an extraction, transformation and loading application.

16. (Original) The method of Claim 1, the step of analyzing is performed by one or more processes and the method further comprises the step of the one or more processes obtaining over a network said metadata that describes said one or more items from said source database.

17. (Original) The method of Claim 1, wherein the step of analyzing is performed by one or more processes and the method further comprises said one or more processes reading at least a portion of the metadata from a machine-readable medium while said machine-readable medium resides at a first location, wherein the metadata about said items was recorded to the machine-readable medium at a second location.

18. (Currently Amended) A method for exporting database data from a source database, comprising the machine-implemented steps of:

extracting metadata that describes one or more items, the data for which is in the source database, wherein the one or more items include at least one of
a view,
a sequence,
a dimension,
a cube,
an ETL mapping,
a queue,
an external table,
a stored procedure, [[and]] or
a database object, wherein the metadata for the database object is stored outside of the source database and a target database,

storing the extracted metadata and data for said one or more items in a module;

analyzing the extracted metadata for dependencies; and

providing the module containing the extracted metadata and the data for said one or more items to a target database.

~~wherein data for said one or more items resides in a data file associated with said source database; and~~

~~providing to a database server that manages the target database access to an~~

~~incorporated data file, wherein said incorporated data file is said data file or a copy thereof.~~

19. (Original) The method of Claim 18, wherein said one or more items include one or more database views from the source database, and the step of extracting metadata that describes one or more items, the data for which is in a source database comprises the step of extracting metadata that describes said one or more database views.

20. (Original) The method of Claim 18, wherein said one or more items include one or more database sequences from the source database, and the step of extracting metadata that describes one or more items, the data for which is in a source database comprises the step of extracting metadata that describes said one or more database sequences.

21. (Original) The method of Claim 18, wherein said one or more items include one or more database dimensions from the source database, and the step of extracting metadata that describes one or more items, the data for which is in a source database comprises the step of extracting metadata that describes said one or more database dimensions.

22. (Original) The method of Claim 18, wherein said one or more items include one or more database cubes from the source database, and the step of extracting metadata that describes one or more items, the data for which is in a source database comprises the step of extracting metadata that describes said one or more database cubes.

23. (Original) The method of Claim 18, wherein said one or more items include one or more ETL mappings from the source database, and the step of extracting metadata that describes one or more items, the data for which is in a source database comprises the step of extracting metadata that describes said one or more ETL mappings.

24. (Original) The method of Claim 18, wherein said one or more items include one or more queues from the source database, and the step of extracting metadata that describes one

or more items, the data for which is in a source database comprises the step of extracting metadata that describes said one or more queues.

25. (Original) The method of Claim 18, wherein said one or more items include one or more external tables from the source database, and the step of extracting metadata that describes one or more items, the data for which is in a source database comprises the step of extracting metadata that describes said one or more external tables.

26. (Original) The method of Claim 18, wherein said one or more items include one or more stored procedures from the source database, and the step of extracting metadata that describes one or more items, the data for which is in a source database comprises the step of extracting metadata that describes said one or more stored procedures.

27. (Original) The method of Claim 18, wherein said one or more items include one or more database objects from the source database, wherein the metadata for the one or more database objects is stored outside of the source database and the target database, and the step of extracting metadata that describes one or more items, the data for which is in a source database comprises the step of extracting metadata that describes said one or more database objects.

28. (Original) The method of Claim 18, wherein the target database stores data in a data files that have a first format, the incorporated data file is in a second format that is different from the first format, and wherein a database server that manages the target database accesses the one or more items from said incorporated data file.

29. (Original) The method of Claim 18, wherein a source database server manages data from said source database, a target database server manages data from said target database,

and the step of extracting metadata that describes one or more items, the data for which is in a source database is performed at least in part by a process that is separate from said source database server and said target database server.

30. (Original) The method of Claim 18, wherein at least a portion of said metadata is read from a source repository separate from said source database.

31. (Original) The method of Claim 30, wherein a source database server manages data from said source database, a target database server manages data from said target database, and said source repository is a repository associated with an application separate from both said source database server and said target database server.

32. (Original) The method of Claim 31, wherein said application is an extraction, transformation and loading application.

33. (Original) The method of Claim 18, the step of extracting is performed by one or more processes and the method further comprises the step of sending over a network said metadata that describes one or more items, the data for which is in a source database.

34. (Original) The method of Claim 33, wherein the step of sending over a network further comprising the step of sending the metadata using the File Transfer Protocol.

35. (Original) The method of Claim 18, wherein the step of extracting is performed by one or more processes and the method further comprises said one or more processes writing to a machine-readable medium said metadata that describes said one or more items from the source database.

36. (Currently Amended) A computer-readable medium carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the ~~method recited in Claim 1~~ steps of:

analyzing metadata that describes one or more items, the data for which is in a source

database, wherein the one or more items include at least one of

a view,

a sequence,

a dimension,

a cube,

an ETL mapping,

a queue,

an external table,

a stored procedure, or

a database object, wherein the metadata for the database object is stored

outside of the source database and the target database;

wherein data for said one or more items resides in a data file associated with said

source database;

performing the following in a single atomic operation:

incorporating the data for said one or more items into the target database by

providing said target database access to an incorporated data file,

wherein said incorporated data file is said data file or a copy thereof;

and

incorporating the metadata for said one or more items into the target database.

37. (Currently Amended) A computer-readable medium as recited in Claim 36, wherein said one or more items include one or more database views from the source database, and the step of analyzing metadata that describes one or more items, the data for which is in a source database comprises the step of analyzing metadata that describes said one or more database views.

~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 2.~~

38-44. (Canceled)

45. (Currently Amended) A computer-readable medium as recited in Claim 36, wherein said one or more items include one or more database objects from the source database, wherein the metadata for the one or more database objects is stored outside of the source database and the target database, and the step of analyzing metadata that describes one or more items, the data for which is in a source database comprises the step of analyzing metadata that describes said one or more database objects.

~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 10.~~

46. (Currently Amended) A computer-readable medium as recited in Claim 36, wherein the target database stores data in a data files that have a first format, the incorporated data file is in a second format that is different from the first format, and wherein a database server that manages the target database accesses the one or more items from said incorporated data file.

~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 11.~~

47. (Currently Amended) A computer-readable medium as recited in Claim 36, wherein a source database server manages data from said source database, a target database server manages data from said target database, and the step of analyzing metadata that describes one or more items, the data for which is in a source database is performed at least in part by a process that is separate from said source database server and said target database server.
~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 12.~~

48. (Currently Amended) A computer-readable medium as recited in Claim 36, wherein at least a portion of said metadata is read from a source repository separate from said source database.
~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 13.~~

49. (Currently Amended) A computer-readable medium as recited in Claim 48, wherein a source database server manages data from said source database, a target database server manages data from said target database, and said source repository is a repository associated with an application separate from both said source database server and said target database server.
~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 14.~~

50. (Currently Amended) A computer-readable medium as recited in Claim 49, wherein said application is an extraction, transformation and loading application.
~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 15.~~

51. (Currently Amended) A computer-readable medium as recited in Claim 36, the step of analyzing is performed by one or more processes and the method further comprises the step of the one or more processes obtaining over a network said metadata that describes said one or more items from said source database.

~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 16.~~

52. (Currently Amended) A computer-readable medium as recited in Claim 36, wherein the step of analyzing is performed by one or more processes and the method further comprises said one or more processes reading at least a portion of the metadata from a machine-readable medium while said machine-readable medium resides at a first location, wherein the metadata about said items was recorded to the machine-readable medium at a second location.

~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 17.~~

53. (Currently Amended) A computer-readable medium carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the steps of: method recited in Claim 18

extracting metadata that describes one or more items, the data for which is in the

source database, wherein the one or more items include at least one of

a view,

a sequence,

a dimension,

a cube,

an ETL mapping,
a queue,
an external table,
a stored procedure, or
a database object, wherein the metadata for the database object is stored
outside of the source database and a target database,
storing the extracted metadata and data for said one or more items in a module;
analyzing the extracted metadata for dependencies; and
providing the module containing the extracted metadata and the data for said one or
more items to a target database.

54. (Currently Amended) A computer-readable medium as recited in Claim 53, wherein
said one or more items include one or more database views from the source database, and the
step of extracting metadata that describes one or more items, the data for which is in a source
database comprises the step of extracting metadata that describes said one or more database
views.

~~carrying one or more sequences of instructions which, when executed by one or more~~
~~processors, causes the one or more processors to perform the method recited in Claim 19.~~

55. (Currently Amended) A computer-readable medium as recited in Claim 53, wherein
said one or more items include one or more database sequences from the source database, and
the step of extracting metadata that describes one or more items, the data for which is in a
source database comprises the step of extracting metadata that describes said one or more
database sequences.

~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 20.~~

56. (Currently Amended) A computer-readable medium as recited in Claim 53, wherein said one or more items include one or more database dimensions from the source database, and the step of extracting metadata that describes one or more items, the data for which is in a source database comprises the step of extracting metadata that describes said one or more database dimensions.

~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 21.~~

57. (Currently Amended) A computer-readable medium as recited in Claim 53, wherein said one or more items include one or more database cubes from the source database, and the step of extracting metadata that describes one or more items, the data for which is in a source database comprises the step of extracting metadata that describes said one or more database cubes.

~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 22.~~

58. (Currently Amended) A computer-readable medium as recited in Claim 53, wherein said one or more items include one or more ETL mappings from the source database, and the step of extracting metadata that describes one or more items, the data for which is in a source database comprises the step of extracting metadata that describes said one or more ETL mappings.

~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 23.~~

59. (Currently Amended) A computer-readable medium as recited in Claim 53, wherein said one or more items include one or more queues from the source database, and the step of extracting metadata that describes one or more items, the data for which is in a source database comprises the step of extracting metadata that describes said one or more queues.
~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 24.~~

60. (Currently Amended) A computer-readable medium as recited in Claim 53, wherein said one or more items include one or more external tables from the source database, and the step of extracting metadata that describes one or more items, the data for which is in a source database comprises the step of extracting metadata that describes said one or more external tables.
~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 25.~~

61. (Currently Amended) A computer-readable medium as recited in Claim 53, wherein said one or more items include one or more stored procedures from the source database, and the step of extracting metadata that describes one or more items, the data for which is in a source database comprises the step of extracting metadata that describes said one or more stored procedures.
~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 26.~~

62. (Currently Amended) A computer-readable medium as recited in Claim 53, wherein said one or more items include one or more database objects from the source database, wherein the metadata for the one or more database objects is stored outside of the source

database and the target database, and the step of extracting metadata that describes one or more items, the data for which is in a source database comprises the step of extracting metadata that describes said one or more database objects.

~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 27.~~

63. (Currently Amended) A computer-readable medium as recited in Claim 53, wherein the target database stores data in a data files that have a first format, the incorporated data file is in a second format that is different from the first format, and wherein a database server that manages the target database accesses the one or more items from said incorporated data file.

~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 28.~~

64. (Currently Amended) A computer-readable medium as recited in Claim 53, wherein a source database server manages data from said source database, a target database server manages data from said target database, and the step of extracting metadata that describes one or more items, the data for which is in a source database is performed at least in part by a process that is separate from said source database server and said target database server.

~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 29.~~

65. (Currently Amended) A computer-readable medium as recited in Claim 53, wherein at least a portion of said metadata is read from a source repository separate from said source database.

~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 30.~~

66. (Currently Amended) A computer-readable medium as recited in Claim 65, wherein a source database server manages data from said source database, a target database server manages data from said target database, and said source repository is a repository associated with an application separate from both said source database server and said target database server.

~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 31.~~

67. (Currently Amended) A computer-readable medium as recited in Claim 66, wherein said application is an extraction, transformation and loading application.

~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 32.~~

68. (Currently Amended) A computer-readable medium as recited in Claim 53, the step of extracting is performed by one or more processes and the method further comprises the step of sending over a network said metadata that describes one or more items, the data for which is in a source database.

~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 33.~~

69. (Currently Amended) A computer-readable medium as recited in Claim 68, wherein the step of sending over a network further comprising the step of sending the metadata using the File Transfer Protocol.

~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 34.~~

70. (Currently Amended) A computer-readable medium as recited in Claim 53, wherein the step of extracting is performed by one or more processes and the method further comprises said one or more processes writing to a machine-readable medium said metadata that describes said one or more items from the source database.

~~carrying one or more sequences of instructions which, when executed by one or more processors, causes the one or more processors to perform the method recited in Claim 35.~~

71. (New) The method of Claim 18, wherein analyzing the extracted metadata for dependencies comprises analyzing the extracted metadata for dangling references.

72. (New) The method of Claim 18, wherein analyzing the extracted metadata for dependencies comprises analyzing the extracted metadata to ensure proper loading into the target database.

73. (New) The method of Claim 18, further comprising removing a portion of the extracted metadata from the module in response to analyzing the extracted metadata for dependencies.

74. (New) The method of Claim 18, further comprising creating meta-metadata to represent the module.

75. (New) The method of Claim 74, further comprising providing the meta-metadata to the target database.

76. (New) The method of Claim 75, further comprising the target database loading the metadata and data for said one or more items based on the meta-metadata.

77. (New) The method of Claim 18, further comprising incorporating the extracted metadata and the data for said one or more items into the target database.